# Lucas Nascimento Machado

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#### **EDUCATION**

# Purdue University Calumet, Hammond, IN

One-year Exchange Program Bachelor of Science in Physics GPA: 3.6/4.0 – Certificate in recognition of Outstanding Academic Achievement

### Federal University of Minas Gerais (UFMG), Brazil

Bachelor of Science in Physics

Expected Graduation Date: August 2015

## State University of Campinas (Unicamp), Brazil

Started Bachelor of Science in Physics/Mathematics/Applied and Computational Mathematics in February 2011 Transferred to Federal University of Minas Gerais in March 2012

#### **Relevant Courses**

Intellectual Property, Innovation and Entrepreneurship, Numerical Methods, Renewable Energy Systems, Introduction to Biomedical Imaging, Astronomy, Nuclear and Particle Physics, Electromagnetism, Quantum Physics I and II, Thermodynamics, Mechanics I and II, Matter Structure I and II

#### Languages

Portuguese (Native) English (Fluent)

#### **Skills**

Familiar with installation, operation, repair and maintenance of laboratory components

Programming in C, MATLAB, and TfReg

Directed major to Biomedical area (Congresses: Medical Physics Congress at Unicamp and Applied Physics to Medicine Congress at Unesp)

#### **EXPERIENCE**

### Brazilian Student Organization - July 2014 to Present

Member and founder of the first organization of Brazilian students at Purdue University Calumet.

#### Colégio Frei Orlando (School), Belo Horizonte, Minas Gerais - Brazil April 2012 to December 2013

Teacher Assistant

- Tutored High School students in Physics.
- Participated in the creation of the school Physics' lab.
- Developed activities and lessons to help students that struggled in Physics

#### SCIENCE RESEARCH / ACADEMIC PROJECTS

## High Energy Physics Research (Purdue University Calumet) - January 2015 to Present

Research instructed by Dr. Neeti Parashar at Fermi National Accelerator Laboratory (Fermilab) in the current semester.

### Energy Systems Research (Purdue University Calumet) - September 2014 to December 2014

Research instructed by Dr. Robert Kramer at Purdue University Calumet about bioenergy.

## Computational Biophysics Laboratory (Federal University of Minas Gerais, Brazil) - April 2014 to June 2014

Program of Scientific Initiation in Mesoscopic models of DNA and RNA: Project to create a model of biochemical parameters of DNA and RNA bonding potential energy.

### Basic Physics Laboratories (Federal University of Minas Gerais, Brazil) - April 2013 to June 2014

Tutoring Program for Undergraduate: Project to encourage students to learn how to teach in physics laboratories, preparing classes and helping groups of students to work in their experiments during the class.